

Amendments to the Claims

1. (Currently amended) A method for streaming multimedia content in a wireless communication system comprising:

receiving, in a server in a data network, a request from a mobile device to stream multimedia content to the mobile device from the server, the request being transmitted over a wireless connection and via a network entity to the server, wherein the network entity is selected from the group consisting of a base station controller (BSC) and a packet data serving node (PDSN);

streaming a portion of the requested multimedia content from the server to the mobile device via the network entity and the wireless connection;

the network entity detecting a termination of the wireless connection during the streaming, and the ~~second~~ network entity responsively notifying the server;

retaining information, the information indicating a point in the multimedia content stream where the termination of the wireless connection occurred;

re-establishing the wireless connection; and

resuming streaming of the multimedia content based on the retained information.

2. (Original) The method of claim 1, wherein the retained information is retained in an extensible markup language tag attribute.

3. (Original) The method of claim 1, wherein the multimedia content is encoded with the Synchronized Multimedia Integration Language and the retained information contains a

time stamp associated with the point in the multimedia content stream where termination of the wireless connection occurred.

4. (Original) The method of claim 1, wherein retaining the retained information comprises retaining an identifier of the mobile device.

5. (Original) The method of claim 4, wherein identifier of the mobile device comprises one of a point-to-point protocol link identifier, a network address identifier and an Internet Protocol address.

6. (Original) The method of claim 1, wherein receiving the request from the mobile device comprises receiving a Real Time Streaming Protocol (RTSP) command.

7. (Original) The method of claim 6, wherein streaming the multimedia content comprises streaming the content in accordance with the RTSP.

8. (Previously presented) The method of claim 1, wherein streaming the multimedia content comprises:

communicating the multimedia content from the server to a multimedia gateway via a multicast router;

communicating the multimedia content from the multimedia gateway to a home agent device;

communicating the multimedia content from the home agent device to the PDSN;

communicating the multimedia content from the PDSN to the BSC;
communicating the multimedia content from the BSC to a base transceiver station (BTS);
and
communicating the multimedia content from the BTS to the mobile device.

9. (Currently amended) The method of claim 1, wherein detecting the termination of the wireless connection comprises:

determining, at the BSC, that a number of bad communication frames received from the mobile device is greater than a threshold level,

wherein the BSC responds to the determining by notifying the server that termination of the wireless connection has occurred.

10. (Currently amended) The method of claim 1, wherein detecting the termination of the wireless connection comprises:

determining, at the BSC, that the wireless connection cannot be handed off from a first base transceiver station (BTS) to a second BTS,

wherein the BSC responds to the determining by notifying the server that termination of the wireless connection has occurred.

11. (Currently amended) The method of claim 1, wherein retaining the information comprises retaining the information at a multimedia gateway, wherein resuming streaming of the multimedia content based on the retained information comprises:

communicating the retained information from the multimedia gateway to the server; and

resuming streaming of the multimedia content from the server to the mobile device, via a multicast router at one of:

the point in the multimedia content stream where the termination of the wireless connection was detected; and

a predetermined time period earlier in the multimedia content stream than the point where the termination was detected.

12. (Previously presented) The method of claim 1, wherein retaining the information comprises retaining the retained information at the server.

13. (Previously presented) The method of claim 1, wherein retaining the information comprises:

communicating the information from the server to a multimedia gateway; and

storing the information in a database operatively associated with the multimedia gateway.

14. (Previously presented) The method of claim 13, wherein resuming streaming of the multimedia content comprises:

communicating the stored information from the multimedia gateway to the server;

responsively sending logic for resuming streaming of the multimedia content from the server to the multimedia gateway; and

executing the logic with the multimedia gateway to resume the multimedia content stream.

15. (Original) The method of claim 1, wherein resuming streaming of the multimedia content occurs automatically in response to reestablishing the wireless connection.

16. (Original) The method of claim 1, further comprising:
responsive to reestablishing the wireless connection, providing a user with an option to resume streaming of the multimedia content or cancel streaming of the multimedia content; and
resuming streaming of the multimedia content in response to a user indication to resume streaming.

17. (Previously presented) A method for streaming multimedia content in a wireless communication system comprising:

receiving, via a packet data network, a streaming protocol command from a mobile device, the command operating as a request that multimedia content be streamed to the mobile device from a server coupled with the network;

streaming at least a portion of the requested multimedia content from the server to the mobile device via a multimedia gateway, via an entity selected from the group consisting of a base station controller (BSC) and a packet data serving node (PDSN), and via a wireless connection to the mobile device;

at the entity, detecting a termination of the wireless connection during the streaming and responsively notifying at least one of the multimedia gateway and the server of the termination of the wireless connection;

retaining information in one of the multimedia gateway and the server, the information indicating a point in the multimedia content where the termination of the wireless connection occurred;

re-establishing the wireless connection; and

resuming streaming of the multimedia content based on the retained information.

18. (Original) The method of claim 17, wherein the streaming protocol command is a Real Time Streaming Protocol command.

19. (Previously presented) The method of claim 17, wherein streaming the multimedia content from the server to the mobile device comprises communicating the multimedia content from the server to the mobile device via the multimedia gateway, a home agent device, the BSC, the PDSN, and a base station transceiver, and

wherein communicating the multimedia content comprises communicating the multimedia content in accordance with the Real Time Streaming Protocol.

20. (Currently amended) The method of claim 17, wherein detecting the termination of the wireless connection comprises:

determining, at the BSC, that a number of bad communication frames received from the mobile device is greater than a threshold level,

wherein the BSC responds to the determining by notifying one of the multimedia gateway and the server that termination of the wireless connection has occurred.

21. (Currently amended) The method of claim 17, wherein detecting the termination of the wireless connection comprises:

determining, at the BSC, that the wireless connection cannot be handed off from a first cell-site to a second cell-site,

wherein the BSC responds to the determining by notifying one of the multimedia gateway and the server that termination of the wireless connection has occurred.

22. (Original) The method of claim 17, wherein retaining the information comprises retaining a timestamp in an extensible markup language attribute tag.

23. (Original) The method of claim 22, wherein the multimedia content is encoded with the Synchronous Multimedia Integrated Language.

24. (Currently amended) The method of claim 17, wherein resuming streaming of the multimedia content based on the retained information comprises:

communicating the retained information from the multimedia gateway to the server; and
resuming streaming of the multimedia content from the server to the mobile device, via a multicast router, at one of:

the point in the multimedia content where the termination of the wireless connection was detected; and

a predetermined time period earlier in the multimedia content than the point where the termination was detected.

25. (Previously presented) The method of claim 17, wherein resuming streaming of the multimedia content based on the retained information comprises resuming streaming of the multimedia content from the server to the mobile device, via a multicast router, at one of:

the point in the multimedia content where the termination of the wireless connection was detected; and

a predetermined time period earlier in the multimedia content than the point where the termination was detected.

26. (Cancelled)

27. (Currently amended) A multimedia gateway included in a data network having a set of instructions stored therein, that when executed, the instructions provide for:

receiving a streaming protocol command from a mobile device, the command operating as a request that multimedia content be streamed to the mobile device from a server coupled with the network;

streaming at least a portion of the requested multimedia content received from the server to the mobile device via a packet data serving node;

receiving a notification from the packet data serving node that a termination of the wireless connection occurred during the streaming;

communicating the notification to the server;

receiving information from the server, the received information indicating a point in the multimedia content stream where the termination of the wireless connection occurred and an identifier of the mobile device;

storing the received information in a database operatively associated with the multimedia gateway;

re-establishing the wireless connection;

sending the received information to the server;

receiving logic from the ~~server~~ server; and

executing the received logic to resume streaming of the multimedia content based on the received information.